

The Relationship of Smoking Hazard Message to Smoking Behavior in Students of North Sumatra State Islamic University

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Abstract

Cigarettes are still a problem in the world and in Indonesia. The policy of pictorial message on cigarette packaging is regulated in Permenkes No. 28 of 2013 concerning the inclusion of warnings and health information on tobacco product packaging. The purpose of this study is to determine the Effect of Cigarette Danger Messages on Cigarette Packs on Smoking Behavior of North Sumatra State Islamic University Students. This research is quantitative research with a cross-sectional research design. This research was conducted at the State Islamic University of North Sumatra. The research period began in January-August 2021. The population in this study was all male students of North Sumatra State Islamic University which amounted to 13.598 students. The sample in this study was as many as 400 respondents in male students of North Sumatra State Islamic University. The data analysis of this study is univariate analysis with descriptive and bivariate analysis with correlation test. The results showed that there was an association between smoking message images causing oral cancer (p-value <0.001 r = -0.596), smoking message images causing lung cancer (p-value <0.001 r = -0.620), smoking message images causing throat cancer 1 (p-value <0.001 r = -0.536), smoking images causing lung and larynx cancer (p-value <0.001 r = -0.537) and smoking images causing laryngeal cancer (p-value <0.001 r = -0.621) smoking behavior students of UIN North Sumatra. It is hoped that the Health Office and the Ministry of Health will review or update the images on cigarette packs with more effective ones to be enlarged in order to reduce the number of smokers in Indonesia.

Keywords: Cigarette hazard message, Smoking behavior, Student

INTRODUCTION

Smoking behavior is still a problem that exists in various parts of the world. According to the WHO (World Health Organization) in 2015, the population of Asia and Australia is 57%, the population of Eastern Europe and the former Soviet Union is 14%, 12% of the population in terms of percentage of tobacco users. of the population of the Americas, 9% of the population of Western Europe and 8% of the population of the Middle East and Africa. ASEAN is a region with 10% of all smokers worldwide and 20% of all tobacco-related deaths worldwide (WHO, 2015).

Based on data from the Basic Health Survey 2013, daily smoking behavior in Indonesia is 36.3% and the average number of cigarettes per day (equivalent to one pack) is 12.3 (Kemenkes RI, 2013). Based on basic health research data in 2018, smoking behavior every day in Indonesia has decreased to 24.3% with an average number of cigarette consumption per day of 12.8 cigarettes (Kemenkes RI, 2018).

Smoking behavior among young people is not a new thing. It is not uncommon for teenagers who are still in school to smoke openly or secretly with friends or alone (Isa et al., 2017; Pratiwi et al., 2022). The government is currently formulating policies with Government Regulation (PP) No. 109 of 2012 concerning Health Protection Against Narcotics in the Form of Tobacco Products, and Minister of Health Regulation No. 28 of 2013 concerning the Inclusion of Health Warnings and health information on tobacco product packaging. According to the rules, cigarette manufacturers must list 40 percents of their packaging with scary images of smoking, including images of smokers with skull-shaped smoke, oral cancer, throat cancer, smokers with children around, and blackened lungs for cancer (Kemenkes RI, 2013).

The policy of pictorial messages on cigarette packaging is regulated in Permenkes No. 28 of 2013 concerning the inclusion of warnings and health information on tobacco product packaging (Ekawati et al., 2019). The Minister of Health explained in detail the inclusion of health warnings and health information on tobacco product packaging, including the requirements for the inclusion of warnings and health information, including the type and color of images, spelling and placement. Picture messages on cigarette packs fill 40% of the surface of cigarette packs (Kemenkes RI, 2013). The purpose of adding picture messages to cigarette packs is to prevent teenagers from smoking. By looking at the scary picture of CBA, it is hoped that young smokers will be motivated to quit smoking because they see the impact of smoking (Rahmawati et al., 2018; Suparman et al., 2020).

According to Trisnowati, teenagers who perceive the message on the cigarette pack positively quit or become a former smoker or smoke or reduce tobacco use, while respondents who perceive the message on the cigerettes packaging negatively continue to smoke (Trisnowati et al., 2018). The results of research by Hutabarat et al., (2019) that active smokers every day see images of advertisements warning of the dangers of smoking on cigarette packs, become natural and do not cause fear effects, maybe at first they are afraid to see advertisements on cigarette packs that inform about the dangers of smoking. Repeated viewing images, which do not actually produce the effects described above on active smokers, make them immune to the information and no longer care about warning images on cigarette packs about the dangers of smoking.

State Islamic University of North Sumatra is one of the State Islamic Universities in North Sumatra and is located at Jalan William Iskandar, Percut Sei Tuan District, Deli Serdang Regency. The results of a preliminary survey conducted by researchers found that the number of students who smoked in the area around the campus were 30 people. Among them are the faculty of social sciences as many as 6 students who smoke at the faculty of social sciences,

the faculty of sharia and law as many as 8 people who smoke at bus stops, the faculty of economics and business as many as 8 people around the faculty, and the faculty of tarbiyah as many as 8 people are married to the faculty of tarbiyah and teacher training. In the State Islamic University of North Sumatra campus environment, smoking behavior is very easy to find even though various policies have been issued including the no-smoking area policy on the campus. Generally, students know the effects of the dangers of cigarettes and what effects they can cause, but it is not a fear for students to stop smoking and smoking behavior has become commonplace among students. It takes high awareness from each student in an effort to quit smoking which starts from reducing cigarette consumption per day and a strong intention and motivation to quit smoking (Deni, 2021).

Based on the background and data above, researchers are interested in examining the relationship of cigarette warning labels on cigarette packs to the smoking behavior of North Sumatra State Islamic University students.

METHODS

Research Type and Design

This study was conducted with a cross-sectional research design because the study was conducted at the same time the dependent variable and the independent variable were measured.

Location and Time of Research

This research was conducted at the State Islamic University of North Sumatra. The research time starts from January – August 2021.

Population and Sample

The population in this study is All students in this study are men of the State Islamic University of North Sumatra which amounted to 13,598 students. The sampel for this study was 400 male respondents of the State Islamic University of North Sumatra.

Sampling Techniques

Purposive sampling was conducted to determine the number of samples in each semester with sample criteria, namely active students of North Sumatra State Islamic University, smoking students, male sex and available to be interviewed.

Research Variables

The dependent variable of this study is the smoking behavior of students of the Faculty of Sharia and Law, State Islamic University of North Sumatra. While the dependent variable of this study is the importance of cigarettes on cigarette packs (messages of the dangers of

smoking cause oral cancer, smoking causes lung cancer, smoking causes throat cancer, smoking causes lung cancer and laryngeal cancer and smoking causes throat cancer).

Research Instruments

The validity and reliability tests of the questionnaires in this study were not used because this study used standard questionnaires from the Global Adult Tobacco Survey (GATS) 2020-2021. To obtain data, questionnaires were distributed to respondents using open-ended and closed-ended questions.

Data Analysis

Analysis of this research data by univariate analysis aims to see the frequency distribution in each variable. And bivariate test analysis using correlation tests to see the relationship between dependent and independent variables at a 95% confidence level.

RESULTS

Tabel 1. Frequency Distribution of Respondent Characteristics

Characteristics of Respondents	f	%
Semester		
Semester II	102	25,5
Semester IV	94	23,5
Semester VI	110	27,5
Semester VIII	94	23,5
Total	**400**	**100**
Smoking Habits		
Yes, Everyday	323	80,8
Yes, Sometimes	77	19,3
Total	**400**	**100**
Age to Start Smoking		
< 20 Years Old	369	92,3
≥ 20 Years Old	31	7,8
Total	**400**	**100**
The Number of Cigerettes Per Day		
1 – 4 stem/day	53	13,3
5 – 14 stem/day	310	77,5
≥ 15 stem/day	37	9,3
Total	**400**	**100**
Types of cigarettes consumed		
Kretek	42	10,5
Filter	328	82,0
Sisha	1	0,3
Vape	29	7,3
Total	**400**	**100**
Smoking Laws		
Mubah	62	15,5
Makruh	161	40,3
Haram	177	44,3
Total	**400**	**100**

Based on Table 1 the results showed that the numberof respondents was in Semester VI as many as 110 (27.5%) and had a daily smoking behavior or habit as much as 323 (80%), respondent started smoking aged <20 years as many as 369 (92.3%). Most respondents smoked cigarettes per day 5-14 cigarettes/day as many as 310 (77.5%) with the type of cigarettes consumed in the past week being filter cigarettes as much as 328 (82%). And the majority of respondents think smoking laws are haram as many as 177 (44.3%).

Tabel 1. Distribution of The Frequency of Danger Messages on Cigarettes on Cigarette Packs in UIN North Sumatra Students

Danger Message on Cigarettes Packs	Mean	SD	Min	Max
Message pictures smoking causes oral cancer	7,79	2,541	1	10
Message pictures smoking causes lung cancer	8,56	2,440	1	10
Message pictures smoking causes throat cancer 1	7,72	2,425	1	10
Message pictures smoking causes lung and laryngeal cancer	7,86	2,145	1	10
Message smoking causes throat cancer 2	8,67	2,284	1	10

Based on Table 2, the results showed that the majority of respondents had a perception of fear of picture messages, smoking caused throat cancer 2 with an average score of 8.67 with a standard deviation of 2.284. Fear level perception points on Picture messages Smoking causes throat cancer 2 lowest score 1 and highest score 10 fear Picture messages smoking causes throat cancer 2.

Tabel 2. Frequency Distribution of The Amount of Cigarette Consumption after Seeing The Danger Message on The Cigarette Packs of State Islamic University of North Sumatra Sumatera Utara

Total Cigarette Consumption	n	%	Mean	SD	Min	Max	95% CI	
							Lower	Upper
1 – 4 stem/day	330	82,5	1,18	0,380	1	2	1,13	1,21
5 – 14 stem/day	70	17,5						
≥ 15 stem/day	0	0						

Based on table 3, the results showed that the majority of respondents consumed cigarettes after seeing the danger message on the cigarette pack, which was 1-4 cigarettes/day as many as 330 (82.5%). The average number of cigarette consumption of respondents after seeing the rapid danger of packs on cigarette packs became 1.18 cigarettes / day (95% CI: 1.13-1.21), with a standard deviation of 0.380 cigarettes/day. The number of cigarette consumption of respondents after seeing the rapid danger of the pack on the lowest cigarette pack of 1 cigarette / day and the number of cigarette consumption of respondents after seeing the rapid danger of the pack on the highest pack of cigarettes 2 cigarettes/day.

Tabel 4. The Relationship Between Smoking Hazard Messages and Smoking Behaviour of State Islamic University of North Sumatra

Smoking Behavior		
Message pictures smoking causes oral cancer	R	-0,596
	p-value (CI=95%)	< 0,001
	N	400
Message pictures smoking causes lung cancer	R	-0,620
	p-value (CI=95%)	< 0,001
	N	400
Message picture smoking causes throat cancer 1	R	-0,536
	p-value (CI=95%)	< 0,001
	N	400
Message pictures smoking causes lung and laryngeal cancer	R	-0,537
	p-value (CI=95%)	< 0,001
	N	400
Message pictures smoking causes throat cancer 2	R	-0,621
	p-value (CI=95%)	< 0,001
	N	400

The results of the study found that there was a relationship between smoking picture messages causing oral cancer (p = <0.001; R=-0.596), picture messages smoking causes lung cancer (p=<0.001; R=-0.620), picture message smoking causes throat cancer 1 (p=<0.001; R=-0.536), message gamber smoking causes lung and laryngeal cancer (p=<0.001; R=-0.537) and picture messages smoking causes throat cancer 2 (p=<0.001; R=-0.621) with smoking behavior of UIN North Sumatra students.

DISCUSSION

Health advice warnings in the form of images on cigarette packs, in addition to educating consumers about the dangers of smoking, are also effective and inexpensive health counseling that can increase public awareness of the health effects of smoking (Lubis et al., 2022). To be effective, health warnings must be easy to see, relevant and easy to remember, and describe things smokers and would be smokers need to know (TCSC-IAKMI, 2013; Permatasari, 2019).

The results of this study showed that there was a relationship between smoking picture messages and oral cancer (p = <0.001; R=-0.596), picture messages smoking causes lung cancer (p=<0.001; R=-0.620), picture message smoking causes throat cancer 1 (p=<0.001; R=-0.536), message gamber smoking causes lung and laryngeal cancer (p=<0.001; R=-0.537) and picture messages smoking causes throat cancer 2 (p=<0.001; R=-0.621) with smoking behavior of State Islamic University of North Sumatra students. The fear of cigarette packet image messages made UIN North Sumatra students after seeing the danger message on cigarette packs, namely 1-4 cigarettes / day as many as 330 (82.5%). The average number of cigarette consumption respondents after seeing the rapid danger of packs on cigarette packs became as

much as 1.18 cigarettes / day. This makes students have a positive perception of the message of the dangers of cigarettes on cigarette packs tends to reduce cigarette consumption behavior.

Based on research by Adiayatama et al., (2016) note that the warning images of the dangers of smoking that can scare most respondents of consecutive smokers are warnings of the dangers of smoking, namely oral cancer, followed by laryngeal cancer and danger to people around smokers, lung cancer and chronic bronchitis, and smoking can cause death. This is because this perception is heavily influenced by each person's psychological factors to illustrate the imagery that elicits the greatest fear in users of the effects smoking has ever experienced.

This research is in line with Trisnowati's (2018) research that five pictorial health warnings are considered very useful to remind smokers of the dangers of smoking, encourage the younger generation to quit smoking or reduce smoking habits. There is a significant relationship between adolescents' perceptions of the dangers of cigarettes in cigarette packs with adolescent smoking behavior.

According to Fitra's research (2019), there is a significant relationship between pictorial warnings on cigarette packs and smoking behavior, because pictorial warnings attract more attention than just text or writing, are more effective in educating smokers about the dangers of smoking for health, so that it can change one's perception to reduce smoking or even make someone stop smoking. According to Umari's (2017) research, there is a relationship between the perception of warning images about the dangers of smoking and smoking behavior. This is because the average respondent welcomes or fears warnings on cigarette packs about the dangers of smoking. Someone who perceives health warning images on cigarette packs positively is more likely to use tobacco than someone who perceives the dangers of smoking on images on cigarette packs negatively and smokes more (Fitra, 2019).

Laiya (2019) shows that images are environments that are very easy to find. Words and images are a great combination when sending messages, information, or health promotion materials. The results of delivering the message/material must be different from the delivery of the message/material using a combination of words and images.

Smoking behavior is the action of someone who carries out smoking activities or actions that are deliberately done to encourage smoking habits, and is the result of decisions taken by someone after considering the pros and cons of smoking (Nasution, 2020; Jufri, 2020). Information about smoking from the environment is an important factor that affects whether or not smoking is good. Therefore, the environment greatly influences the smoking decision-making process (Ahmad et al., 2023).

The picture of a pack of cigarettes is a health warning message about the dangers of

smoking (Samosir et al., 2019). The image displayed on the government's health warning cigarette pack contains non-verbal communication to reduce active smokers in Indonesia and is expected to influence the values, attitudes, beliefs, motivations and behaviors of smokers (Harijadi et al., 2022). The government changed health warning guidelines from sentences to pictures to make smokers aware of the impact of cigarettes so that smokers can better understand the impact of cigarettes if they continue to smoke (Nella, 2018; Mariyamah et al., 2020).

Images of cigarette packs contain three main factors that can influence behavior according to Green's theory. The message of the picture wrapped in cigarettes is a policy as well as the government's commitment as a form of concern in campaigning for the dangers of smoking to the public (*reinforcing factors*). Picture messages wrapped in cigarettes contain information and health education (*enabling factors*). The existence of health information and education will increase knowledge, values and attitudes that can influence behavior (*predisposing factors*) (Nurlia, 2022). In addition, the message of images wrapped in cigarettes is one form of visual media in health promotion in the form of real images so that it can affect smoking behavior. Real images can stimulate thinking about the risks of smoking, consequently becoming a very strong urge for someone to change their habit to smoke (Wibowo et al., 2018).

According to the researcher's assumption that students already understand the dangers of smoking, but there are still students who smoke, this is because students have the perception that picture messages on packs have never happened around them and therefore there are still students smoking.

CONCLUSIONS

The results showed that Respondent was a student from each faculty at State Islamic University of North Sumatra, with the majority of respondents in the age category of <25 years, being second semester students and respondents thinking the smoking law was haram. The majority of respondents smoke cigarettes per day 5-14 cigarettes/day as many as 310 (77.5%) are included in the category of moderate smokers. The majority of respondents reduce the amount of cigarette consumption per day to 1-4 cigarettes/day after seeing the message of the dangers of cigarettes.

There was an association between picture message smoking causes oral cancer (p-value <0.001 r=-0.596), picture message smoking causes lung cancer (p-value <0.001 r=-0.620), picture message smoking causes throat cancer 1 (p-value <0.001 r =-0.536), picture smoking

causes cancer of lung and larynx (p-value <0.001 r=-0.537) and picture smoking causes cancer of larynx (p-value <0.001 r=-0.621) pSmoking behavior of State Islamic University of North Sumatra. This means that the more afraid students are when they see the picture message of a cigarette pack, the lower the cigarettes they consume.

Itis hoped that it can be a reference for the Health Office and the Ministry of Health in reviewing or updating the images on cigarette packs with more effective ones to be enlarged in order to reduce the number of smokers in Indonesia.

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